AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

Amend the paragraph beginning on page 1, line 2, as follows:

CROSS-REFERENCE TO ~~RERATED~~ RELATED APPLICATION

This application is based upon and claims priority of Japanese Patent Application No. 2003-031863, filed on February 10, 2003, the contents being incorporated herein by reference.

Amend the paragraph beginning on page 1, line 23, continuing on to page 2, as follows:

Insulation films of silicon oxide film have been so far used as the insulation films of the gate insulation films, tunnel insulation films, etc. of the MOS structures. However, as semiconductor devices are micronized, the gate insulation films and the tunnel insulation films are increasingly thinned. Consequently, a difficulty of increase of the gate leak current, etc. due to the tunnel current has become conspicuous. To solve such difficulty it is being studied to use as the gate insulation films, etc. insulation films of high dielectric constants (hereinafter called high-k insulation films) which are higher than the dielectric constant of silicon oxide film as the gate insulation films, etc., whereby the physical film thickness of the gate insulation films, etc. are made thick. As such high-k insulation film materials, hafnium oxide (HfO_2), ~~halfnium alminate~~ hafnium aluminate (HfAlO), zirconium oxide (ZrO_2) are recently noted because of characteristics of the high reaction free energy, the high band gap, etc. (refer to, e.g., E.P. Gusev

et al., "Ultra high-K gate stacks for advanced CMOS devices," International Electron Devices Meeting Technical Digest (2001), pp. 451-454, and W. Zhu et al., "HfO_2 and HfAlO for CMOS: Thermal Stability and Current Transport," International Electron Devices Meeting Technical Digest (2001), pp. 463-466).

Amend the paragraph beginning on page 16, line 2, as follows:

The semiconductor device according to the present embodiment is characterized mainly in that on the layer film of the silicon oxide film 18 and the high-k film 20 of ~~halfnium~~ hafnium oxide film in the first element region 14, the oxygen diffusion preventing film 22 of silicon nitride film, whose oxygen diffusion coefficient is lower than the high-k film 20 is formed.

Amend the paragraph beginning on page 19, line 15 as follows:

The ~~polysilioen~~ polysilicon film 34 is formed generally in a reducing atmosphere. In the method for fabricating the semiconductor device according to the present embodiment, before the step of forming the polysilicon film 34, the oxygen diffusion preventing film 22 of silicon nitride film whose oxygen diffusion coefficient is lower than the high-k film 20 is formed on the high-k film 20 of the hafnium oxide film which is known as a good oxygen conductor. Accordingly, when the polysilicon film 34 is formed in a reducing atmosphere, the reaction of reducing the silicon oxide film 18 formed below the high-k film 20 in the first element region 14 is suppressed. Thus, the insulation decrease of the gate insulation film 23 due to the reduction of

the silicon oxide film 18 can be suppressed, whereby the generation of the gate leak current in the first element region 14 can be suppressed.

Amend the paragraph beginning on page 24, line 23, continuing on page 25, as follows:

Next, the high-k film 38 of a 2 nm-thickness hafnium aluminate film is formed on the entire surface by, e.g., CVD. Conditions for forming the high-k film 38 of the ~~halfnium~~ hafnium aluminate film are, e.g., tetra(tertiary butoxy)hafnium ($Hf(O\text{-}t\text{-}Bu)_4$) and tri(tertiary butyl)aluminium ($Al(t\text{-}Bu)_3$) and oxygen gas as the raw material gases, and a 500 °C substrate temperature. At this time, the flow rate of the raw material gases is adjusted to form the high-k film 38 of a ~~halfnium~~ hafnium aluminate film containing alumina by, e.g., above 50 % including 50 %.

Amend the paragraph beginning on page 25, line 11 as follows:

In the method for fabricating the semiconductor device according to the present embodiment, the high-k film 38 of the ~~halfnium~~ hafnium aluminate film is formed on the silicon oxide film 18 before the step of forming the polysilicon film 34 in a reducing atmosphere. The hafnium aluminate film whose alumina content ratio is, e.g., above 50 % including 50 % is not readily reduced even by the exposure to a reducing atmosphere. In the forming the polysilicon film 34 in a reducing atmosphere, the reaction of reducing the silicon oxide film 18 formed below the high-k film 38 of the hafnium aluminate film in the first element region 14 can be suppressed. Thus, the insulation decrease of the gate insulation film 39 due to the reduction of the silicon oxide film 18 can be suppressed, and the generation of the leak current in the first element region 14 can be suppressed.

Amend the paragraph beginning on page 28, line 5 as follows:

Example 2 is an n type MOS transistor including a gate electrode of a ~~polysiliocn~~ polysilicon film formed on a silicon substrate with the layer film of a 5.5 nm-thickness silicon oxide film and a 3 nm-thickness hafnium aluminate film formed therebetween. The composition of the hafnium aluminate film was $Hf_{0.5}Al_{0.5}O_2$. The measured result of Example 2 is plotted by ○ in the graph.